



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 300

[EPA-HQ-SFUND-1986-0005; FRL-9743-1]

National Oil and Hazardous Substance Pollution Contingency Plan; National Priorities List:

#### Partial Deletion of the Torch Lake Superfund Site

**AGENCY:** Environmental Protection Agency.

**ACTION:** Direct final rule.

**SUMMARY:** The U.S. Environmental Protection Agency Region 5 is publishing a Direct Final Notice of Deletion of the Isle Royale Tailings and Michigan Smelter Tailing parcels of Operable Unit 3 (OU3), and the Mason Sands Tailings parcel of Operable Unit 1 (OU1) of the Torch Lake Superfund Site (Site), located in Houghton County, Michigan from the National Priorities List (NPL). The NPL, promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, is an appendix to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This direct final partial deletion is being published by EPA, with the concurrence of the State of Michigan through the Michigan Department of Environmental Quality (MDEQ), because EPA has determined that all appropriate response actions under CERCLA at these identified parcels have been completed. However, this partial deletion does not preclude future actions under Superfund.

This partial deletion pertains to the surface tailings, drums, and slag piles of Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3 and the Mason Sands Tailings parcel of OU1. The following land parcels will remain on the NPL and are not being considered for

deletion as part of this action: Dollar Bay, Point Mills, Calumet Lake Tailing, Boston Pond Tailing, North Entry and Quincy Smelter.

**DATES:** This direct final partial deletion is effective [insert date 60 days from the date of publication in the *Federal Register*] unless EPA receives adverse comments by [insert date 30 days from the date of publication in the *Federal Register*]. If adverse comments are received, EPA will publish a timely withdrawal of the direct final partial deletion in the *Federal Register* informing the public that the deletion will not take effect.

**ADDRESSES:** Submit your comments, identified by Docket ID no. EPA-HQ-SFUND-1986-0005, by one of the following methods:

- <http://www.regulations.gov>: Follow on-line instructions for submitting comments.
- Email: Nefertiti DiCosmo, Remedial Project Manager, at [dicosmo.nefertiti@epa.gov](mailto:dicosmo.nefertiti@epa.gov)
- Email: Dave Novak, Community Involvement Coordinator, at [novak.dave@epa.gov](mailto:novak.dave@epa.gov)
- Fax: Gladys Beard, NPL Deletion Process Manager, at (312) 886-2077.
- Mail: Nefertiti DiCosmo, Remedial Project Manager, U.S. Environmental Protection Agency (SR-6J), 77 West Jackson Boulevard, Chicago, IL 60604, (312) 886-6148, or Dave Novak, Community Involvement Coordinator, U.S. Environmental Protection Agency (SI-7J), 77 West Jackson Boulevard, Chicago, IL 60604, (312) 886-7478 or 1-800-621-8431.
- Hand deliver: Dave Novak, Community Involvement Coordinator, U.S. Environmental Protection Agency (SI-7J), 77 West Jackson Boulevard, Chicago, IL 60604. Such deliveries are only accepted during the docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID no. EPA-HQ-SFUND-1986-0005. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through <http://www.regulations.gov>, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in the hard copy. Publicly available docket materials are available either electronically at <http://www.regulations.gov> or in hard copy at:

Regional Office, U.S. Environmental Protection Agency – Region 5

77 West Jackson Boulevard

Chicago, IL, 60604

Hours: Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Lake Linden/Hubbell Public Library

601 Calumet Street

Lake Linden, MI 49945

(906) 296-0698

Hours: Monday through Friday 8:00am to 4:00 p.m., Tuesday and Thursday 6:00 p.m. to 8:00 p.m.

Portage Lake District Library

105 Huron

Houghton, MI 49931

(906) 482-4570

Hours: Monday, Tuesday and Thursday 10:00 a.m. to 9:00 p.m., Wednesday and Friday 10:00 a.m. to 5:00 p.m., and Saturday 12:00 p.m. to 5:00 p.m.

**FOR FURTHER INFORMATION CONTACT:** Nefertiti DiCosmo, Remedial Project

Manager, U.S. Environmental Protection Agency (SR-6J), 77 West Jackson Boulevard, Chicago, IL 60604, (312) 886-4737, [dicosmo.nefertiti@epa.gov](mailto:dicosmo.nefertiti@epa.gov)

**SUPPLEMENTARY INFORMATION:**

Table of Contents:

I. Introduction

II. NPL Deletion Criteria

III. Deletion Procedures

IV. Basis for Site Deletion

## **I. Introduction**

EPA Region 5 is publishing this Direct Final Notice of Deletion of the Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3, and Mason Sands Tailings parcel of OU1 of the Torch Lake Superfund (Site) from the NPL and requests public comments on this action. The NPL constitutes Appendix B of 40 CFR part 300, which is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended. EPA maintains the NPL as the list of sites that appear to present a significant risk to public health, welfare, or the environment. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substance Superfund (Fund). This partial deletion of the Torch Lake Superfund Site is proposed in accordance with 40 CFR 300.425(e) and is consistent with the Notice of Policy Change: Partial Deletion of Sites Listed on the National Priorities List (60 FR 55466) on November 1, 1995. As described in 300.425(e) (3) of the NCP, sites deleted from the NPL remain eligible for Fund-financed remedial actions if future conditions warrant such actions.

Because EPA considers this action to be noncontroversial and routine, this action will be effective [insert date 60 days from the date of publication in the *Federal Register*] unless EPA receives adverse comments by [insert date 30 days after this publication in the *Federal Register*]. Along with this Direct Final Notice of Partial Deletion, EPA is co-publishing a Notice of Intent for Partial Deletion in the “Proposed Rules” section of the *Federal Register*. If adverse comments are received within the 30-day public comment period on this partial deletion action, EPA will publish a timely withdrawal of this direct final Notice for Partial Deletion before the effective date of the partial deletion, and the deletion may not take effect. Alternatively EPA

may, as appropriate, prepare a response to comments and continue with the deletion process on the basis of the Notice of Intent for Partial Deletion and the comments already received. In this case, there will be no additional opportunity to comment on the agency's response.

Section II of this document explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action. Section IV discusses the Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3 and the Mason Sands Tailings parcel of OU1 of the Torch Lake Superfund Site and demonstrates how the deletion criteria are met at these land parcels. Section V discusses EPA's action to partially delete the Site parcels from the NPL unless adverse comments are received during the public comment period.

## **II. NPL Deletion Criteria**

The NCP establishes the criteria that EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making such a determination pursuant to 40 CFR 300.425(e), EPA will consider, in consultation with the state, whether any of the following criteria have been met:

- i. responsible parties or other persons have implemented all appropriate response actions required;
- ii. all appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or
- iii. the remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate.

Pursuant to CERCLA section 121(c) and the NCP, EPA conducts five-year reviews to ensure the continued protectiveness of remedial actions where hazardous substances, pollutants, or contaminants remain at a site above levels that allow for unlimited use and unrestricted

exposure. EPA conducts such five-year reviews even if a site is deleted from the NPL. EPA may initiate further action to ensure continued protectiveness at a deleted site if new information becomes available that indicates it is appropriate. Whenever there is a significant release from a site deleted from the NPL, the deleted site may be restored to the NPL without application of the hazard ranking system.

### **III. Deletion Procedures**

The following procedures apply to deletion of the Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3, and the Mason Sands Tailings parcel of OU1 of the Torch Lake Superfund Site:

- (1) EPA consulted with the State of Michigan prior to developing this direct final Notice of Partial Deletion and the Notice of Intent for Partial Deletion co-published today in the “Proposed Rules” section of the *Federal Register*.
- (2) EPA has provided the State 30 working days for review of this Direct Final Notice of Partial Deletion and the parallel Notice of Intent for Partial Deletion prior to their publication today, and the State, through MDEQ, has concurred on the partial deletion of the Site from the NPL.
- (3) Concurrently with the publication of this direct final Notice of Partial Deletion, a notice of the availability of the parallel Notice of Intent for Partial Deletion is being published in the Daily Mining Gazette Newspaper, located in Houghton, Michigan. The newspaper notice announces the 30-day public comment period concerning the Notice of Intent for Partial Deletion of the Site from the NPL. A public meeting will be held prior to the end of the comment period to ensure the public understands the delisting process and the locations of the land parcels proposed for deletion.

- (4) EPA placed copies of documents supporting the proposed partial deletion in the deletion docket and made these items available for public inspection and copying at the Site information repositories.
- (5) If adverse comments are received within the 30-day public comment period on this partial deletion action, EPA will publish a timely notice of withdrawal of this Direct Final Notice of Partial Deletion before its effective date and will prepare a response to comments. EPA may continue with the deletion process on the basis of the Notice of Intent for Partial Deletion and the comments already received.

Deletion of a portion of a site from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Deletion of a portion of a site from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Section 300.425(e) (3) of the NCP states that the deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions.

#### **IV. Basis for Site Deletion**

The following information provides EPA's rationale for deleting the Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3 and Mason Sands Tailings parcel of OU1 of the Torch Lake Superfund Site from the NPL. The Isle Royale Tailings area comprises approximately 64 acres of cover material northwest of U.S. 41, next to Portage Lake. It is located near the town of Houghton, in the northwestern corner of Section 5 in Portage Township, Michigan (Township 54 N Range 33 W). The Torch Lake Superfund Site Isle Royale Tailings property parcel is also referred to as Isle Royale Stamp Mill or Isle Royale Sands. It is the parcel of property on the west side of Houghton that was part of a mine rock crushing operation. The Site has no relation to the Isle Royale that is the island located in Lake Superior.



A legal description of the Isle Royale Tailings portion of the Torch Lake Superfund Site is as follows: A parcel of land in Government Lot 2, Section 5, T54N, R33W, City of Houghton, Houghton County, Michigan. Commencing at the West ¼ corner of said Section 5; thence North 1069.47 feet; thence East 1584.79 feet to the point of beginning on the Northeasterly right-of-way of the Soo Line Railroad; thence N 33° 42' 20" E 229.36 feet to the South right-of-way (66-ft. R/W) of Carlos Street of the recorded plat of Royale Isle Subdivision; thence S 56° 17'40" E 380.00 feet along said Carlos Street right-of-way and extension thereof; thence S 33° 42' 20" W 250.29 feet to the Northeasterly right-of-way of said Soo railroad; thence along said right-of-way on a curve to the right N 53° 08' 19" W 380.68 feet more or less to the point of beginning.

The Michigan Smelter Tailings parcel is located in a 15-acre, low-lying area of stamp sands east of Houghton Canal Road on the shores of Portage Lake, in Sections 28, 33, and 34 of Adams/Stanton Township, Michigan (55 N Range 34 W). There is a piece of property nearby, on the west side of Houghton Canal Road, known as Michigan Smelter that includes the buildings and abandoned materials where industrial activities took place. This property is not part of the Torch Lake Superfund Site and was not investigated or remediated as part of the Site activities. There may be high levels of arsenic or other contaminants associated with past mining activity in that area, but such contamination would not be considered as part of the Torch Lake Superfund Site.

The legal description of the Michigan Smelter Tailings portion of the Torch Lake Superfund Site is as follows - Parcel 1: Section 33, T55N, R34W, Adams Township, Houghton County, Michigan, Government Lot 1 lying North of County Road 554, except commencing at the North ¼ corner; thence South 320 feet to P.O.B.; thence Southeasterly 90.18 feet; thence Northeasterly 569.59 feet; thence North 202.57 feet; thence Southeasterly 410.48 feet to South

right of way of Canal Road; thence Southeasterly along Canal Road 888 feet more or less; thence South 676 feet to South line of Government Lot 1; thence Southwesterly 1692 feet to the West line of Government Lot 1; thence North 980.78 feet to P.O.B. Parcel 2: Section 34, T55N, R34W, Adams Township, Houghton County, Michigan, Government Lot 3 lying North of County Road 554, also West 121.90 feet of Government Lot 4 lying North of County Road 554. Parcel 3: Section 28, T55N, R34W, Stanton Township, Houghton County, Michigan, part of Government Lot 4, commencing North 00° 34' 31" West 35.08 feet from South ½ Corner; thence North 00° 34' 31" West 1252.70 feet; thence south 89° 33' 12" East 102.60 feet; thence South 89° 35' 56" East 151.39 feet to shore; thence South 46° 13' 52" East 804.26 feet; thence South 55° 13' 38" East 1279.14 ; thence West 713.78 feet; thence North 46° 48' 32" West 766.52 feet; thence South 43° 09' 07" West 66 feet; thence South 01° 45' 30" East 57.69 feet; thence South 08° 31' 32" West 141.99 feet; thence South 10° 03' 39" West 69.72 feet; thence South 71° 33' 12" West 552.04 feet to P.O.B.

The Mason Sands Tailings area is about 225 acres and is located within a fenced in area south of M-26 and expands until the land meets the lake (Torch Lake). It is adjacent to the Village of Mason and is located in Sections 23, 26, and 27 of Township 55 North, Range 33 West. Located within the Mason Sands parcel of the Site are dilapidated industrial structures, building foundations, and other debris. These abandoned structures, foundations and debris are not part of the Torch Lake Superfund Site and were not investigated or remediated. The surface tailings at this Mason area constitute the area addressed by the Torch Lake Site remedial action. The legal description of the Mason Sands portion of the Torch Lake Superfund Site is as follows. Government. Lot 2 – Section 14 – T.55N-R.33W lying East of State Highway M-26 Right-of-Way, except as follows: Commencing at a point on shore of Torch Lake 500' from meander post on line between Sections 13 & 14, thence N.55°40' West to North boundary line of Lot 2 Section

14, thence East along North boundary of said Lot 2 to shore of Torch Lake, thence Southwesterly along said lake to Point of Beginning except Right-of-Way of C&H RR. 53.32.A. Gov't. Lots 1, 2, 3, and 4 – Section 23 – T.55N.-R.33W. lying East of abandoned railroad Right-of-Way, except as follows: Part of Government Lot 4, Section 23, and Government Lot 5, Section 26, T.55N, R.33W, Osceola Township, Houghton County, Michigan, more particularly described as follows: Commencing at a section corner common to Sections 22, 23, 26 and 27, T.55N, R.33W; then due South 480.66 feet to the point of beginning: thence N43° 54'04"E 1164.53 feet; thence S51° 08'38"E 124.89 feet to a point located in the Northwestern right-of-way line of State Highway M-26; thence S00° 02'18"W 112.29 feet to a point located in the Southeasterly right-of-way line of State Highway M-26; thence S50° 16'58"E 21.89 feet; thence S35° 39'41"E 251.20 feet; thence S32° 31'34"W 189.24 feet; thence N55° 59'01"W 158.27 feet; thence N58° 48'17"W 75.02 feet to a point located in the Northwestern right-of-way line of an abandoned railroad; thence S32° 31'34"W 44.66 feet along said Northwestern right-of-way line of an abandoned railroad; thence on a curve to the right, having a radius of 2814.93 feet a long chord bearing and distance of S39° 15'17"W 659.63 feet, 661.15 feet along said Northwestern right-of-way line of an abandoned railroad; thence continuing along said abandoned railroad right-of-way S45° 59'00" W 458.12 feet; thence due North 468.57 feet to the point of beginning, containing 461,453 square feet, which is 10.59 acres including road right-of-ways. Government. Lot 5 – Section 26 – T.55N-R.33W. lying East of abandoned railroad Right-of-Way, except as follows: Part of Government Lot 4, Section 23, and Government Lot 5, Section 26, T.55N, R.33W., Osceola Township, Houghton County, Michigan, more particularly described as follows: Commencing at a section corner common to Sections 22, 23, 26, and 27, T.55N, R.33W.; then due South 480.66 feet to the point of beginning: thence N43° 54'04"E 1164.53 feet; thence S51° 08'38"E 124.89 feet to a point located in the Northwestern right-of-way line of State Highway

M-26; thence S00° 02' 18"W 112.29 feet to a point located in the Southeasterly right-of-way line of State Highway M-26; thence S50° 16' 58"E 21.89 feet; thence S35° 39' 41"E 251.20 feet; thence S32° 31' 34"W 189.24 feet; thence N55° 59' 01"W 158.27 feet; thence N58° 48' 17"W 75.02 feet to a point located in the Northwesterly right-of-way line of an abandoned railroad; thence S32° 31' 34"W 44.66 feet along said Northwesterly right-of-way line of an abandoned railroad; thence on a curve to the right, having a radius of 2814.93 feet a long chord bearing and distance of S39° 15' 17"W 659.63 feet, 661.15 feet along said Northwesterly right-of-way line of an abandoned railroad; thence continuing along said abandoned railroad right-of-way S45° 59' 00" W 458.12 feet; thence due North 468.57 feet to the point of beginning, containing 461,453 square feet, which is 10.59 acres including road right-of-ways. Government Lot 1 – Section 27 – T.55N-R.33W lying east of abandoned railroad Right-of-Way. That portion of Government Lot 2 – Section 27 – T.55N-R.33W lying in the West 1/2 of the Southwest 1/4 of said Section. It being understood and intended that the above described land extends to the waters edge of Torch Lake and to include any tailing sands and slag that may have accreted to said land, or to other lands in Section 26 – T.55N. – R.33W.

## **Site Background and History**

### **Site Location**

The Site is located on the Keweenaw Peninsula in Houghton County, Michigan. The Site ([CERCLIS ID MID980901946](#)) includes Torch Lake, the northern portion of Portage Lake, and the northern entry of Torch Lake. The following areas were selected for remedial measures and thus became part of the Site: defined areas of stamp sands, tailing piles, and slag materials along the shore of and in the vicinity of Torch Lake, Northern Portage Lake, Keweenaw Waterway, Lake Superior, Boston Pond, Calumet Lake, Lake Linden, Hubbell/Tamarack City, Mason, Calumet Lake, Michigan Smelter, Isle Royale, Gross Point, and Quincy Smelter. These defined

areas were not investigated at depth and were defined as part of the Torch Lake Superfund Site the surficial materials (stamp sands, tailings, and slag) on these areas and their relative locations to the Torch Lake water body. These areas cover over 600 acres. During the Site investigation, samples were taken of the surface (0- 6 inches) and shallow subsurface (0 – 3 feet) stamp sands, tailings, and slag piles at the frequency of approximately one composite sample per 20 acre-parcel. Data generated reflected similar chemical characteristics in all samples collected. This data was sufficient to assume homogeneity of these materials and to support selection of the Site's remedial action.

The remedial action included the installation of a soil vegetative cover over these defined areas of stamp sands, tailings, and slag in order to meet the Site Remedial Action Objectives (RAOs). The remedial action only addressed surface materials associated with the covered land parcels. There may be non-Site related contamination with depth or in the vicinity of these defined areas of stamp sands, tailings, and slag that are not addressed by this Site remedial action (i.e., vegetative cover). This potential contamination was not evaluated or addressed as part of the remedial measures for the Torch Lake Superfund Site. Non-Site related contamination, if identified in the future, will not be addressed by a subsequent action as part of the Torch Lake Superfund Site's remedial action.

### **Site History**

Torch Lake was the site of copper milling and smelting facilities and operations for over 100 years. Torch Lake was a repository of milling wastes, and served as the waterway transportation to support the mining industry. The first mill opened on Torch Lake in 1868. At the mills, copper was extracted by crushing or stamping the rock into smaller pieces and driving them through successively smaller meshes. The copper and crushed rocks were separated by gravimetric sorting in a liquid medium. The copper was sent to a smelter. The crushed rock

particles, called tailings, were discarded along with mill processing water, typically by pumping them into the Lake.

Mining output, milling activity, and tailing production peaked in the Keweenaw Peninsula in the early 1900s to 1920. All of the mills at Torch Lake were located on the west shore of the Lake and many other mining mills and smelters were located throughout the Keweenaw Peninsula. In the early 1900s, advances in technology allowed recovery of copper from tailings previously deposited in Torch Lake. Dredges were used to collect submerged tailings which were then screened, recrushed, and gravity separated. An ammonia leaching process involving cupric ammonium carbonate was used to recover copper and other metals from conglomerate tailings. During the 1920s, chemical reagents were used to further increase the efficiency of reclamation. The chemical reagents included lime, pyridine oil, coal tar creosotes, wood creosote, pine oil, and xanthates. After reclamation activities were complete, chemically treated tailings were returned to the lake. In the 1930s and 1940s, the Torch Lake mills operated mainly to recover tailings in Torch Lake. In the 1950s, copper mills were still active; but by the late 1960s, copper milling had ceased.

Over 5 million tons of native copper was produced from the Keweenaw Peninsula and more than half of this was processed along the shores of Torch Lake. Between 1868 and 1968, approximately 200 million tons of tailings were dumped into Torch Lake filling at least 20 percent of the Lake's original volume.

In June 1972, a discharge of 27,000 gallons of cupric ammonium carbonate leaching liquor occurred into the north end of Torch Lake from the storage vats at the Lake Linden Leaching Plant. The Michigan Water Resources Commission (MWRC) investigated the spill. The 1973 MWRC report discerned no deleterious effects associated with the spill, but did observe that discoloration of several acres of the lake bottom indicating previous discharges.

In the 1970s, environmental concern developed regarding the century-long deposition of tailings into Torch Lake. High concentrations of copper and other heavy metals in Torch Lake sediments, toxic discharges into the Lake, and fish abnormalities prompted many investigations into long and short-term impacts attributed to mine waste disposal. The International Joint Commission's Water Quality Board designated the Torch Lake basin as a Great Lakes Area of Concern (AOC) in 1983. Also in 1983, the Michigan Department of Public Health announced an advisory against the consumption of Torch Lake sauger and walleye fish due to tumors of unknown origin.

The Torch Lake Site was proposed for inclusion on the National Priorities List (NPL) in October of 1984, Federal Register (49 FR 40320). The Site was placed on the NPL in June 1986, (51 FR21054). The Torch Lake Site is also on the list of sites identified under Michigan's Natural Resources and Environmental Protection Act 451 Part 201. Residential use is planned for these land parcels after they are deleted from the NPL.

### **Remedial Investigation and Feasibility Study (RI/FS)**

On May 9, 1988 Special Notice Letters were issued to Universal Oil Products and Quincy Mining Company to perform a Remedial Investigation/Feasibility Study (RI/FS). Universal Oil Products was the successor corporation of Calumet Hecla Mining Company which operated its milling and smelting on the shore of Lake Linden and disposed the generated tailings in the area. On June 13, 1988 a Notice Letter was issued to Quincy Development Company, which was the current owner of a tailing pile located on the Lake shore of Mason City. Negotiations for the RI/FS Consent Order with these Potentially Responsible Parties (PRPs) were not successful due to issues such as the extent of the Site, and the number of PRPs. Subsequently, EPA contracted with Donohue & Associates in November 1988 to perform the RI/FS at the Site.

On June 21, 1989 EPA collected a total of eight samples from drums located in the Old Calumet and Hecla Smelting Mill Site near Lake Linden, the Ahmeek Mill Site near Hubbell City, and the Quincy Site near Mason. On August 1, 1990 nine more samples were collected from drums located above the Tamarack Site near Tamarack City. Based on the results of these samples, EPA determined that some of these drums may have contained hazardous substances. During the week of May 8, 1989 EPA also conducted ground penetrating radar and a sub bottom profile (seismic) survey of the bottom of Torch Lake. The area in which this survey was conducted is immediately off-shore from the Old Calumet and Hecla Smelting Mill Site. The survey located several point targets (possibly drums) on the bottom of Torch Lake.

Due to the size and complex nature of the Site, six OUs have been defined for the Site. OU1, OU2 and OU3 are the remedial OUs; and OU4, OU5 and OU6 are the removal OUs. OU1 includes surface tailings, drums, and slag piles on the western shore of Torch Lake. Approximately 500 acres of tailings were previously exposed surficially in OU1. The Hubbell/Tamarack Tailings, the Lake Linden Tailings and Mason Sands parcels are included in OU1. OU2 includes groundwater, surface water, submerged tailings and sediment in Torch Lake, Portage Lake, the Portage channel, and other surface water bodies at the Site. OU3 includes the North Entry of Lake Superior Tailings, Michigan Smelter Tailings, Quincy Smelter Tailings, Calumet Lake Tailings, Isle Royale Tailings, Boston Pond Tailings, and Grosse-Point (Point Mills) Tailings, and Dollar Bay Tailings. Remedial Investigations have been completed for all six OUs. The RI for OUs 1 and 3 only investigated the surface (0 – 6 inches) and shallow subsurface (0 – 3 feet) stamp sands. In addition, the RI assumed that the stamp sands were homogenous, i.e., the stamp sands had similar characteristics wherever they were located.

The sampling performed to characterize the OU3 and OU1 tailings was adequate to select the Torch Lake Site remedial action based on the homogeneity of the parameters measured, the



distribution of contaminant compounds, and the relatively low levels of contaminants found.

While hot spot contamination may exist, it is not attributable to tailings composition, and could not be reliably located or predicted using any reasonable sampling program. The RI and Baseline Risk Assessment (BRA) reports for OU1 were finalized in July 1991. The RI and BRA reports for OU3 were finalized on February 7, 1992.

### **Record of Decision Findings**

The Record of Decision (ROD) for OU1 and OU3 was signed on September 30, 1992; and the ROD for OU2 was signed on March 31, 1994.

### **Operable Unit 1 and Operable Unit 3 ROD (September 30, 1992)**

The selected remedial action for the various tailings areas was a soil and vegetative cover, and deed restrictions to control the migration of tailing piles. The cover prevents direct contact exposures as well as prevents erosion from surface water runoff and the wind. The cover helps prevent the further degradation of Torch Lake's eco-system, allowing the Lake to recover over time.

The RAOs for OU1 and OU3 were developed as a result of data collected during the RI and included activities to reduce or minimize the exposure to and release of contaminants in tailings and/or slag located at the Site. These include:

1. Reduce or minimize potential risks to human health associated with the inhalation of airborne contaminants from the tailings and/or slag located at the Site;
2. Reduce or minimize potential risks to human health associated with direct contact with and/or the ingestion of the tailings and/or the slag located at the Site;
3. Reduce or minimize the release of contaminants in tailings to the groundwater through leaching; and

4. Reduce or minimize the release of contaminants in tailings to the surface water and sediment by soil erosion and/or air deposition.

All of the RAOs for the Torch Lake parcels in this deletion package have been met with the successful implementation of a vegetative cover over the stamp sands, tailing piles, and slag materials and with the implementation of deed restrictions which prevent disturbance of the vegetative covers. The vegetative soil cover reduces airborne and direct contact exposure to the contaminants in the stamp sands, tailings, and slag. The affected groundwater is part of OU2, for which the selected remedy was no action. OU2 was deleted from the NPL in 2002 and since the selected remedy for groundwater was no action, the reduction or minimization of the release of contaminants in tailings to the groundwater through leaching does not apply to OU's 1 and 3. The vegetative soil cover serves to stabilize the stamp sands, tailings, and slag and reduce the erosion of these materials and their associated contaminants to the surface water and sediment.

A 12 acre portion of the Isle Royale tailings in OU3 was excluded from the area to be covered with soil and vegetation because it was developed as a sewage treatment facility. The remaining 48 acres was covered with soil and vegetation by the Portage Lake Water and Sewage Authority as part of the sewage treatment facility development plan.

A 90 acre portion of the Isle Royale Tailings was developed as a residential area and was excluded from the area to be covered with soil and vegetation.

A 60 acre area of the Isle Royale Tailings portion is currently being used to make cement blocks and as a finished block storage area for the Superior Block Company and was excluded from the area to be covered with soil and vegetation. The owner and/or operator of Superior Block Company must use dust control measures such as water spray during the operation of mining and other activities in order to reduce the release of dust into the air.

## **Operable Unit 2 ROD (March 31, 1994)**

The selected remedy for OU2 (groundwater, surface water and sediments associated with the Site), which is not the focus of this partial deletion, was “No Action” with long-term monitoring and Institutional Controls with respect to groundwater use. OU2 is impacted by OU1 and OU3 because wind-blown and eroded tailings from OU1 and OU3 migrate into the surface water and contaminate the sediment. The contaminated stamp sand serves as a continuing source of environmentally harmful contamination to the Lake and diminished the effectiveness of the Lake's natural sedimentation process.

## **Remedial Design**

In August 1994, an Interagency Agreement (IAG) was signed with the United States Department of Agriculture (USDA)-Natural Resources Conservation Service (NRCS) to perform remedial design (RD) work. The RD was conducted in conformance with the 1992 ROD and was completed for the entire Site in September 1998.

## **Construction Activities**

Actual on-site construction began in June 1999 and was completed in September 2005. A Preliminary Close-Out Report (PCOR) documenting construction completion was signed on September 23, 2005.

## **Operable Unit 1**

Mason Sands Tailings (225 acres covered) were covered in October 2002. Just prior to on-site construction activities at Mason Sands, the USDA-NRCS commissioned Michigan Technological University to conduct an archaeological survey to evaluate and document the cultural remnants at the Mason Sands portion of the Site. This was done because of the numerous historical mining and milling related relics located around the Mason area and the concern over losing important cultural remnants as a result of remedy implementation. The

results of the survey were presented in a report dated May 2001, “*Archeological Survey Report of the Quincy Mining Company Torch Lake Smelter & Reclamation Plant at Mason Sands Torch Lake EPA Superfund Site*”, which was filed in the EPA’s Torch Lake Site Administrative Record. The May 2001 report concluded that implementation of the remedy at the Mason Sands portion of the Site would have only a minor negative impact on cultural and historical values, and therefore, EPA proceeded with remedy implementation.

The remedial design specifications were modified during the implementation phase and sandy soil, consisting of six to ten inches of sandy-loam soil and a vegetative mat were used in place of topsoil. The vegetative mat was achieved through a seed mix applied directly on top of the sandy-loam soil. The seed mix was typically applied at approximately 90 pounds per acre. The typical seed mix contained six species of plants, including perennial ryegrass (*Lolium perenne*), tall fescue (*Festuca arundinacea*), creeping red fescue (*Festuca rubra*), red clover (*Trifolium pratense*), alfalfa (vernal *Medicago falcata*), and birdsfoot trefoil (*Lotus corniculatus*). This mix of plant species was selected because of their rapid growth rate and relative resilience with minimal maintenance. Rapid stabilization of the soil cover material with vegetation was important at the Site in order to avoid soil washouts and to accommodate the short growing season. Variations of this seed mix were applied to a small number of areas to accommodate landowner preference. Overall, the vegetative growth is well established and is stabilizing the soil portion of the cover material.

The sandy-loam borrow soil was located and obtained by construction firms under contract with the USDA-NRCS to implement the remedy and met modified USDA-NRCS soil specifications. Borrow soils for Mason Sands were obtained directly across the narrow Torch Lake channel located on the south-east shore of the Mason Sands. Remedial action construction activities were performed according to approved design and specifications at Mason Sands and it

is anticipated that the cover material and shoreline protection will continue to meet remedial action objectives established for the Site.

### **Operable Unit 2**

No physical work was required as part of the OU2 No Action ROD, thus there were no construction activities for this OU. EPA deleted OU2 in the April 2002 partial NPL delisting.

### **Operable Unit 3**

Remedial action construction activities were performed according to approved design and specifications at Michigan Smelter Tailings. The 1992 ROD for OU1 and OU3 designated some exceptions to the soil cover for the Isle Royale Tailings area. These exceptions included portions that were being developed or used for other purposes. Areas that were covered continued the same soil and seed mix as used in OU1. In 2004, EPA completed the remedy at the Isle Royale Tailings by placing a 6-inch vegetative cover over area stamp sands and placing rip-rap along the shoreline of the area. The change to include rip-rap was documented in a Memo to the File dated July 7, 2004.

### **Institutional Controls**

In 1994, EPA issued an Administrative Order on Consent (AOC) to all affected landowners requiring them, within six months of the AOC, to implement the appropriate deed restriction on their property. The deed restrictions run with the land and bind future owners to the restrictions. The institutional controls serve to protect vegetative cover and thus prevent residual mining contamination from entering surface water by ensuring that no disturbance of vegetative cover occurs; or if disturbance occurs, the owner is required to replace soil and repair vegetative cover. There are Restrictive Covenants on approximately half of the properties at the Site, which include the Michigan Smelter Tailings property. The Declaration of Restrictive Covenants for Isle Royale Tailings was signed on October 14, 2008. The following restriction

applies; “If during the process of any development, building, construction, or other activity on the property by or with consent from the owner of the property, the cover is disturbed so that upon completion of the development, construction, building or other activity stamp sand is exposed, then the owner of the property shall cover the exposed stamp sand and shall re-vegetate the re-covered area”.

### **Cleanup Goals**

The objectives of the remedies were to control exposures to Site contaminants and control erosion of stamp sands, tailings and slag to the surface water and sediments by covering them with vegetation. The remedial actions at Isle Royale Tailings, Michigan Smelter Tailings, and Mason Sands Tailings are operational and functional. The remedial actions are functioning properly and performing as designed.

### **Operation and Maintenance (O&M)**

EPA conducted activities necessary to ensure that the implemented remedy at Isle Royale Tailings, Michigan Smelter Tailings, and Mason Sands was operational and functional for a period up to three years after remedial construction at the last parcel. The remedy was jointly determined by EPA and MDEQ to be functioning properly and performing as designed in September 2008. EPA conducted annual observations of the remediated areas for three years after construction, and conducted major repairs as necessary, on each area where the remedy was implemented.

In 2002, EPA conducted a study of terrestrial environments at the Site to characterize and document the ecological conditions of the tailing areas before and after implementation of the remedy. The results of the study were presented in the *Torch Lake Stamp Sand Evaluation Report* dated March 2003. The report indicated a significant environmental improvement. The soil and vegetative cover has resulted in the development of a soil stabilizing plant community and habitat which has attracted birds and mammals.

In 1999 and 2000, as part of long-term monitoring, EPA conducted environmental sampling as a way to establish the environmental baseline conditions of Torch Lake. The results of the sampling efforts are presented in the *Baseline Study Report* dated August 2001. Future long-term monitoring events will be conducted by MDEQ and the results compared to the 2001 baseline study to identify changes and/or establish trends in lake conditions. MDEQ has had the lead for OU2 monitoring since 2002, when OU2 was deleted from the NPL.

In 2004, MDEQ conducted sampling activities for monitoring of Torch Lake. The monitoring was undertaken to document and measure the status of natural recovery of the Lake following remedial actions. The 2004 sampling work included assessing the benthic community populations, measuring sediment toxicity to benthic invertebrates, measuring concentrations of metals and semi-volatile organic compounds in sediment and groundwater, and studying the sedimentation process in lake sediments. The 2004 MDEQ long-term monitoring data includes reports with information relevant to sedimentation rates and sediment toxicity.

MDEQ will be conducting O&M of the shoreline protection and cover material. In accordance with the September 1998 Superfund Site Contract (SSC) signed by EPA and MDEQ, O&M was to begin three years after the remedy implementation or when the remedy was jointly determined by EPA and MDEQ to be functioning properly as designed, whichever is earlier. This milestone was reached in September 2008 for Isle Royale Tailings, Michigan Smelter Tailings, and Mason Sands Tailings; along with several other Torch Lake property parcels.

#### **Five-Year Review (FYR)**

EPA conducted FYRs of the Site in 2003 and 2008. In the reviews, EPA concluded that all remedial actions are complete. The 2008 FYR noted that the Isle Royale, Michigan Smelter Tailings and Mason Sands remedies are protective of human health and the environment in the short-term. The

2008 FYR calls for continued documentation from landowners at the Site to verify proper deed restrictions are in place. The next FYR will be conducted in 2013.

### **Community Involvement**

Public participation activities have been satisfied as required in CERCLA section 113(k), 42 U.S.C. 9613(k), and CERCLA section 117, 42 U.S.C. 9617. Documents in the deletion docket, which EPA relied on for recommendation of the Partial Deletion of this Site from the NPL, are available to the public in the information repositories, and at [www.regulations.gov](http://www.regulations.gov). Documents in the docket include maps which identify the specific parcels of land that are proposed in this Notice (Isle-Royale Tailings, Michigan Smelter Tailings, and Mason Sands). Additional community outreach will be conducted to ensure the transparency of the deletion process; to increase awareness of potential non-Site related environmental issues near the deleted parcels; and to help the community understand exactly where the deleted portions of the Torch Lake Site are located.

### **Determination that the Site Meets the Criteria for Deletion in the NCP**

The NCP (40 CFR 300.425(e)) states that portions of a site may be deleted from the NPL when no further response action is appropriate. EPA, in consultation with the State of Michigan, has determined that no further action is appropriate.

### **V. Deletion Action**

The EPA, with concurrence of the State of Michigan, through MDEQ, has determined that all appropriate response actions under CERCLA, other than operation, maintenance, monitoring and five-year reviews, have been completed. Therefore, EPA is deleting the Isle Royale Tailings and Michigan Smelter Tailings parcels of OU3 and the Mason Sands Tailings parcel of OU1 of the Torch Lake Superfund Site from the NPL.

Because EPA considers this action to be noncontroversial and routine, EPA is taking it without prior publication. This action will be effective [insert date 60 days from the date of



publication in the *Federal Register*] unless EPA receives adverse comments by [insert date within 30 days of this publication in the *Federal Register*]. If adverse comments are received within the 30-day public comment period, EPA will publish a timely withdrawal of this direct final notice of partial deletion before the effective date of the partial deletion and it will not take effect. EPA may prepare a response to comments and continue with the deletion process on the basis of the notice of intent to partially delete and the comments already received. In such case, there will be no additional opportunity to comment.

### **List of Subjects in 40 CFR Part 300**

Environmental protection, Air pollution control, Chemicals, Hazardous waste, Hazardous substances, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Dated: September 19, 2012.

Susan Hedman,  
Regional Administrator,  
U.S. EPA, Region 5.

For the reasons set out in this document, 40 CFR part 300 is amended as follows:

### **PART 300—[AMENDED]**

1. The authority citation for part 300 continues to read as follows:

Authority: 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601-9657; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923; 3 CFR, 1987 Comp., p. 193.

#### **Appendix B – [Amended]**

2. In table 1 of Appendix B to part 300, under Michigan “MI”, the entry for "Torch Lake", “Houghton County, Michigan” is revised to read as follows:

Appendix B to Part 300- -National Priorities List

Table 1.-General Superfund Section

State		Site name			City/County	(Notes) <sup>a</sup>
*		*			*	
MI		Torch Lake			Houghton	P

\* \* \* \* \*

(a) A=Based on issuance of health advisory by Agency for Toxic Substances and Disease Registry (if scored, HRS score need not be >28.50).

\* \* \* \* \*

P=Sites with partial deletion(s).

[FR Doc. 2012-25968 Filed 10/22/2012 at 8:45 am; Publication Date: 10/23/2012]